

Title (en)  
DIAGNOSIS DEVICE FOR AT LEAST ONE PNEUMATIC VALVE ACTUATOR ARRANGEMENT

Title (de)  
DIAGNOSEVORRICHTUNG FÜR WENIGSTENS EINE PNEUMATISCHE VENTIL-AKTUATOR-ANORDNUNG

Title (fr)  
SYSTEME DE DIAGNOSTIC POUR AU MOINS UN ENSEMBLE SOUPAPE-ACTIONNEUR PNEUMATIQUE

Publication  
**EP 1812718 B1 20080820 (DE)**

Application  
**EP 04803190 A 20041119**

Priority  
EP 2004013157 W 20041119

Abstract (en)  
[origin: US7620522B2] A diagnostic device for at least one pneumatic valve actuator arrangement, comprises a pressure sensor, a volumetric flow sensor, a control means for producing control signals for the valve actuator arrangement and position sensors for detecting the position of at least one moving actuator member. The diagnostic device also includes a first diagnostic module for leak detection, a second diagnostic module for the detection of a choking effect in pneumatic supply and venting lines and at least one third diagnostic module for the detection of load and friction changes in the case of the moving actuator member and/or of valve switching faults, switching means being provided for deactivating the at least one third diagnostic module in the case of the detection of a fault by the first and/or second diagnostic module. Using this diagnostic device it is possible to detect, owing to cooperation of the diagnostic modules, faults and trouble conditions in an extremely systematic fashion both qualitatively and quantitatively.

IPC 8 full level  
**F15B 19/00** (2006.01)

CPC (source: EP US)  
**F15B 19/005** (2013.01 - EP US)

Cited by  
DE102008062290A1; DE102008062292A1; DE102008062289A1; CN110300857A; CN113482986A; DE102016200924A1; DE102018116048A1; DE102018116048B4; DE102019214882A1; US8521334B2; US11549528B2; US8509952B2; DE102016200924B4; US8443821B2; WO2018153524A1; DE102020204735B3; US11578736B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2006056214 A1 20060601**; AT E405748 T1 20080915; CN 101061320 A 20071024; CN 101061320 B 20110608; DE 502004007932 D1 20081002; DK 1812718 T3 20081124; EP 1812718 A1 20070801; EP 1812718 B1 20080820; JP 2008520919 A 20080619; JP 4707717 B2 20110622; US 2008065355 A1 20080313; US 7620522 B2 20091117

DOCDB simple family (application)  
**EP 2004013157 W 20041119**; AT 04803190 T 20041119; CN 200480044446 A 20041119; DE 502004007932 T 20041119; DK 04803190 T 20041119; EP 04803190 A 20041119; JP 2007541696 A 20041119; US 66361904 A 20041119